

DART AEROSPACE LTD		Work Order:	24724
Description: Doubler		Part Number:	D3144-13 15
05.11.02 C AH		Qty:	
Dwg: D3144 Rev. B page 41		Page 1 of 1	

Step	Location	Procedure	By	Date	Qty
1	DC	Issue Traveler	HA	05.11.02	
2	PG	Issue P/O: 2008889 Email or Ship DXF file to vendor Laser Cut D3144-15 flat pattern per Dwg D3144 Possible Supplier: GFI or Industrial Laser Material release note is required	HA	05/11/02	10
3	RG	Receive and Inspect for transit damage Enure material release note is attached	LC	5/11/04	10
4	QC6	Inspect dimensions as per Dwg D3144	HA	05.11.04	10
5	GA	Deburr	ML	05.11.30	10
6	FP	Chemical Conversion Coat per QSI 005 4.1	ML	05.11.30	10
7	FP	Powder Coat Black Sandtex (Ref: 4.3.5.7) per QSI 005 4.3	ML	05.11.30	10
8	QC3	Inspect Powder Coat	CL	05/12/01	10
9	ST	Identify and Stock	CL	05/12/01	10
10	AC	Cost / part: _____			
11	DC	Close W/O Inspect Level 21	CS	05/12/01	10

Rev	Date	Change	Revised By	Approved
A	04.11.29	New issue	KJ/RF	

RELEASED
05/11/30

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes ☒ No ☐ DQA: ☒ Date: 05/12/10

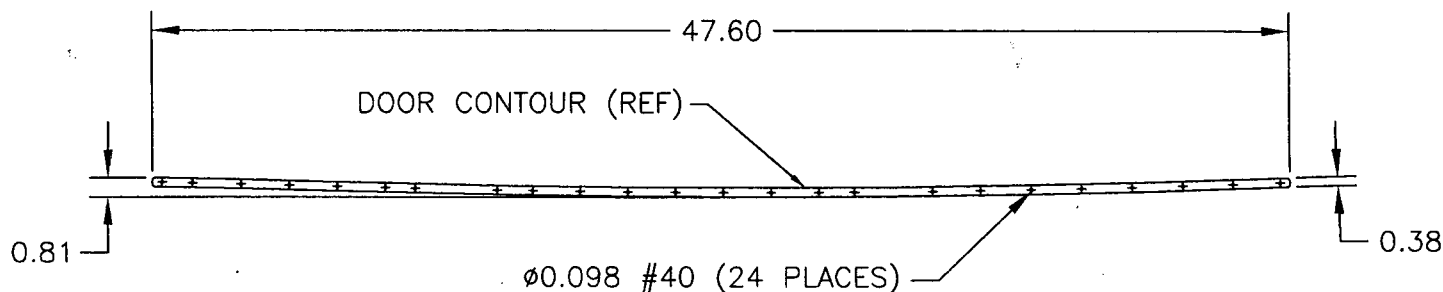
QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

PRELIMINARY ISSUE

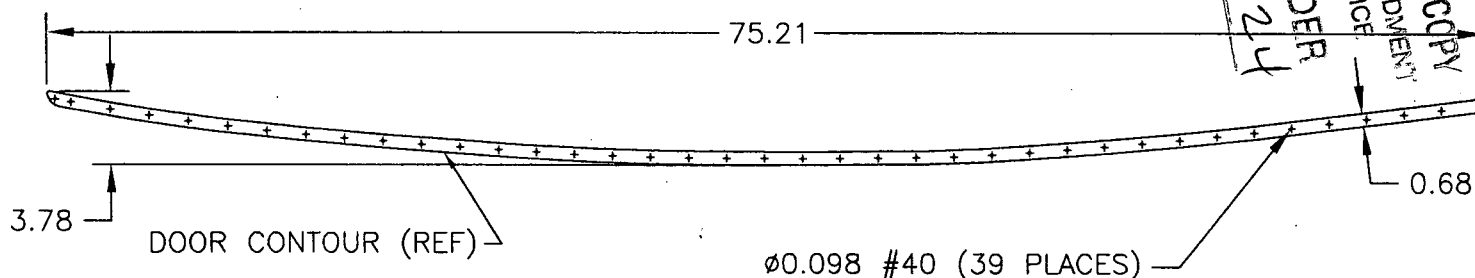
DESIGN	RF	DRAWN BY	RF	DART AEROSPACE LTD	
CHECKED		APPROVED		HAWKESBURY, ONTARIO, CANADA	
DATE	05.10.19	TITLE	DOUBLER	DRAWING NO.	D3144
				SHEET 4 OF 9	REV. C
				SCALE	NTS



D3144-15 DOUBLER
SCALE 1:8

D3144-15 NOTES:

- 1) MATERIAL: 2024-T3 SHEET (QQ-A-250/4) 0.032 THICK (REF DART SPEC M2024T3S.032)
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
POWDER COAT BLACK SANDTEX (4.3.5.7) PER DART QSI 005 4.3
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.010
- 6) MACHINE PER DRAWING FILE "D3144-C4.DWG"



D3144-13 DOUBLER
SCALE 1:10

REPLACES PREMIER P/N B30-23000-211

D3144-13 NOTES:

- 1) MATERIAL: 2024-T3 SHEET (QQ-A-250/4) 0.020 THICK (REF DART SPEC M2024T3S.020)
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
POWDER COAT BLACK SANDTEX (4.3.5.7) PER DART QSI 005 4.3
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.010
- 6) MACHINE PER DRAWING FILE "D3144-C4.DWG"

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 24724

Job Costing Report

Dart Aerospace Ltd.
Hawkesbury

Nov 02, 2005
03:54 pm

Work Order No : 0024724
Project Name : D3144-15
Project For : WK546
Work Order Type : Main
Main WO Number :
House Part Number : D3144-15
Description :
Manufactured : No
Amount Req'd : 0
Amount Done : 0
Start Date : 11-02-05
Est Finish Date : 11-17-05
Act Finish Date :
Drawings Req'd : No
Ok for Approval :
Approval Rec'd :

Department Code:
Burden Flags : NNNNNNNN
WO Status : Open
Invoice State : Not Invoiced
Invoice Date :
Invoice Number :
Invoice Amount : 0.00
Order Entry No :
OE Value : 0.00
Est Mark Up : 0.000%
Actual Mark Up : 0.000%
\$0 Posted to Finished Goods

	Estimated	Actual	Var. %	Posted	To Post
Material Cost :	0.00	0.00	0.00	0.00	0.00
Engineering Hours :	0.00	0.00	0.00		
Engineering Cost :	0.00	0.00	0.00	0.00	0.00
Production Hours :	0.00	0.00	0.00		
Production Cost :	0.00	0.00	0.00	0.00	0.00
Packaging Hours :	0.00	0.00	0.00		
Packaging Cost :	0.00	0.00	0.00	0.00	0.00
OverHead Hours :	0.00	0.00	0.00		
OverHead Cost :	0.00	0.00	0.00	0.00	0.00
CNC Hours :	0.00	0.00	0.00		
CNC :	0.00	0.00	0.00	0.00	0.00
Misc. Hours :	0.00	0.00	0.00		
Misc. :	0.00	0.00	0.00	0.00	0.00
Burden :	0.00	0.00	0.00		
Total Cost :	0.00	0.00	0.00		
Mark up :	0.000	0.000			
Selling Cost :	0.00	0.00			

	Estimated	Actual
Labour Hrs/Amount Done :	0.00	0.00
Profits/(Loss) :	0.00	0.00

CERTIFICATE OF COMPLIANCE
CERTIFICAT DE CONFORMITE



Membre de / A Member of **Thomas & Betts**

180 LABROSSE AVENUE
POINTE CLAIRE, QC
H9R 1A1

DART AEROSPACE LTD
1270 ABERDEEN ST.
HAWKESBURY, ON K6A 1K7

CERTIFICATE NO. 1 OUR JOB NO J0135191 SHIPPING MEMO 0325319

ITEM	QUANTITY	PURCHASE ORDER	PART NUMBER	REV	NAME	DWG ISSUE
-	10 PCS	2008889	D3144-15	C	DOUBLER	C

MATERIAL AL 2024-T3 (QQ-A-250/4) SUPPLIED BY ALCOA INC MAT. REL. NO. 370061 ATT'D

	PROCESS	PROCESSOR	RELEASE NOTE #
1			
2			
3			
4			
5			
6			
7			
8			
9			

WE HEREBY CERTIFY ALL THE PARTS COVERED BY THIS CERTIFICATE HAVE BEEN MANUFACTURED FROM MATERIAL SUPPLIED ON RELEASE NOTE SHOWN ABOVE AND THAT ALL PARTS HAVE BEEN INDIVIDUALLY INSPECTED AND CONFORM TO THE DRAWINGS AND PURCHASE ORDER REFERENCED ABOVE.

DATE 23 NOVEMBER 2005

G.F.I. Q.C. REP.

Baron Han



**LES MÉTAUX
SPÉCIALISÉS
SAMUEL**

Programme d'Assurance Qualité Enregistré / Registered Q.A. Program
ISO 9001:2000 AS9100

LETTRE DE CONFORMITÉ - LETTER OF COMPLIANCE

Date: 22 NOVEMBRE 2005

Company Name: G.F.I. Division of Thomas & Betts limited
Address: 180 avenue Labrosse
City: Pointe Claire, Qué.
Zip Code: H9R 1A1

du client: 59543 # de commande SSMQ: 847440
Customer's order #: SSMQ's Order #:

La présente est pour certifier que le matériel détaillé ci-dessous est conforme aux exigences de votre commande et des normes du grade tel que décrit:

The following is to certify that the material listed below meets your order requirements and grade standards as described:

Matériau/Our em #	# de pièces/ # of pieces	Épaisseur/Grandeur Guage/Size	Alliage/Trempe Alloy/Temper	Spécification / Specification	Lot/Heat
	1	.032" X 48" X 144"	2024 T3	AMS-QQ-A-250/4	370061

En à vous,
Yours truly,



Wade Griffiths

Remis à l'administration.
Administration Clerk.

MÉTAUX SPÉCIALISÉS SAMUEL, 21525 CLARK-GRAHAM, BAIE D'URFÉ, QUÉBEC H9X 3T5
SPECIALITY METALS, 21525 CLARK-GRAHAM, BAIE D'URFÉ, QUÉBEC H9X 3T5

TÉL: 514-457-3399
FAX: 514-457-9393

LET. DE. COM 12/01/C

FIELD INSPECTION REPORT

Alcoa Inc.

PITTSBURGH, PA DAVENPORT WORKS
Ship From: RIVERDALE, IA.

I hereby certify that the material covered by this certificate has been inspected with, and has been found to meet, the
the requirements described therein, including any specifications forming a part of the description and that samples
relative of the material met the composition limits and had the mechanical properties shown on the face of this sheet.

408309 124064
Ship Date B.L. No.
2005-05-04 75184
Invoice No. 10367
Alcoa No. Item
P.O. No./Govt Contract No. DCE10145-3
Customer
N17163 SAMUEL SON-MISSISS

Page 1

Mark J. Vrablic
Director of Manufacturing Davenport Works

Kenton P. Young
Quality Assurance Manager

To: SAMUEL, SON & CO. LIMITED,
2360 DIXIE ROAD,
MISSISSAUGA, ON, L4Y 1Z7

Item Description
.032 IN TK X 48 IN W (N) A/T 2024-T3 COILED SHEET MILL FINISH. PER AMS-QQ-
A-250/4 REV A PER AMS4037 REV N PER
ASTMB209 REV 04 ((NOT MARKED)) COIL SIZES:
ID 20 IN COIL WGTs: MAX 4000 LB PKG WGT: 5000
LB EXPORT PACK QUAN TOL +/-40 %
CQR 0156270 REV 01 CUST REQ 05-05-
01 *** W/E 05-05-07 ***

Package Ticket	Lot	Weight	Quantity	UOM	Pc Id/Serl
279612	370061	3443	1	PC	
279613	370061	3195	1	PC	
279639	370061	2517	1	PC	
		9155	3		

for CQR: 0156270.1
T PRODUCED AND MARKED TO THE REQUIREMENTS OF AMS-QQ-A-250/4 ALSO MEETS THE REQUIREMENTS OF QQ-A-250/4E, AMENDMENT 2.
T PRODUCED AND MARKED TO THE REQUIREMENTS OF QQ-A-250/4E AMENDMENT 2 ALSO MEETS THE REQUIREMENTS OF AMS-QQ-A-250/4.

0156270.1 -Specification Limits

Dir	UTS	TYS	EL4D
Long Transv.	KSI	KSI	PCT
Max	63.0	42.0	15
Min			

al Composition	SI	FE	CU	MN	MG	CR	ZN	TI	Other	Other
Max	.50	.50	4.9	.9	1.8	.10	.25	.15	.05	.15
Min			3.8	.30	1.2					

Each Total Aluminum
REMAIN

370061 -Mechanical, Physical, Metallography, Quantometer Results

Dir	No. Test	UTS	TYS	EL4D
Long Transv.	2	KSI	KSI	PCT
	Max	69.7	47.4	19
	Min	69.4	47	17

D 427805
D 427806
D 427807

ED INSPECTION REPORT

Alcoa Inc.

PITTSBURGH, PA DAVENPORT WORKS

Ship From: RIVERDALE, IA.

certify that the material covered by this certificate has been inspected with, and has been found to meet, the requirements described therein, including any specifications forming a part of the description and that samples of the material met the composition limits and had the mechanical properties shown on the face of this sheet.

408309

124064

Ship Date

B.L. No.

Invoice No.

Alcoa No. Item

Page 2

2005-05-04

75184

10367

DCE10145-3

P.O. No./Govt Contract No.

Customer

N17163

SAMUEL SON-MISSISS

Mark J. Vrabec

Kenton P. Young

Mark J. Vrabec
Director of Manufacturing Davenport Works

Kenton P. Young
Quality Assurance Manager

370061 - Mechanical, Physical, Metallography, Quantometer Results (cont.) -----
 mber Chemical SI FE CU MN MG CR ZN TI
 3 Actuals .07 .16 4.6 .65 1.5 .00 .16 .03